

## WEST Search History

DATE: Wednesday, June 25, 2003

**Set Name Query**  
side by side

**Hit Count Set Name**  
result set

*DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=OR*

L6	L5 and gene with delet\$ with (syncytial or RSV)	48	L6
L5	l1 not l2	132	L5
L4	L3 and syncytial	2	L4
L3	l2 and (respiratroy or RSV) same (gene with deletion)	15	L3
L2	L1 and @ad<19960715	32	L2
L1	(RSV or respiratory adj syncytial) same (gene with delet\$4)	164	L1

END OF SEARCH HISTORY

## STN Search History

FILE 'HOME' ENTERED AT 08:02:29 ON 25 JUN 2003

L1 209 (RESPIRATORY (A) SYNCYTIAL OR RSV) AND ((MAJOR (3A) NUCLEOCAPSID  
OR N) (P) (NUCELOCAPSID (3N) PHOSPHOPROTEIN OR P) (P) (LARGE  
ADJ POLYMERASE OR L))

L3 1 L2 AND (DELETION OR MUTATION OR TRUNCATION) (S) (SMALL (A) HYRDO  
PHOBIC OR SH) (A) (GENE OR PROTEIN)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH' ENTERED AT 08:03:04 ON  
25 JUN 2003

L1 209 S (RESPIRATORY (A) SYNCYTIAL OR RSV) AND ((MAJOR (3A) NUCLEOCAP  
L2 74 DUP REM L1 (135 DUPLICATES REMOVED)  
L3 1 S L2 AND (DELETION OR MUTATION OR TRUNCATION) (S) (SMALL (A) HY  
L4 23 S L2 NOT PY>1996  
L5 0 S L4 AND (POLYMERASE (2A) ELONGATION)  
L6 4 S L4 AND (M2 OR M2#### OR M2-1 OR M2 (A) ORF1 OR M2-ORF1)  
L7 6 S L2 AND ELONGATION (S) (FACTOR OR PROTEIN )  
L8 2 S L7 AND L4  
L9 0 S L8 NOT L6

L6 ANSWER 1 OF 4 MEDLINE  
 AN 96133881 MEDLINE  
 DN 96133881 PubMed ID: 8552680  
 TI Transcription elongation factor of **respiratory syncytial**  
 virus, a nonsegmented negative-strand RNA virus.  
 AU Collins P L; Hill M G; Cristina J; Grosfeld H  
 CS Laboratory of Infectious Diseases, National Institute of Allergy and  
 Infectious Diseases, National Institutes of Health, Bethesda, MD  
 20892-0720, USA.  
 SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF  
 AMERICA, (1996 Jan 9) 93 (1) 81-5.  
 Journal code: 7505876. ISSN: 0027-8424.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199602  
 ED Entered STN: 19960306  
 Last Updated on STN: 19960306  
 Entered Medline: 19960222  
 AB RNA synthesis by the paramyxovirus **respiratory syncytial**  
 virus, a ubiquitous human pathogen, was found to be more complex than  
 previously appreciated for the nonsegmented negative-strand RNA viruses.  
 Intracellular RNA replication of a plasmid-encoded "minigenome" analog of  
 viral genomic RNA was directed by coexpression of the **N**,  
**P**, and **L** proteins. But, under these conditions, the  
 greater part of mRNA synthesis terminated prematurely. This difference in  
 processivity between the replicase and the transcriptase was unanticipated  
 because the two enzymes ostensibly shared the same protein subunits and  
 template. Coexpression of the **M2** gene at a low level of input  
 plasmid resulted in the efficient production of full-length mRNA and, in  
 the case of a dicistronic minigenome, sequential transcription. At a  
 higher level, coexpression of the **M2** gene inhibited  
 transcription and RNA replication. The **M2** mRNA contains two  
 overlapping translational open reading frames (ORFs), which were  
 segregated for further analysis. Expression of the upstream ORF1, which  
 encoded the previously described 22-kDa **M2** protein, was  
 associated with transcription elongation. A model involving this protein  
 in the balance between transcription and replication is proposed. ORF2,  
 which lacks an assigned protein, was associated with inhibition of RNA  
 synthesis. We propose that this activity renders nucleocapsids  
 synthetically quiescent prior to incorporation into virions.

L6 ANSWER 2 OF 4 MEDLINE  
 AN 96102154 MEDLINE  
 DN 96102154 PubMed ID: 8524804  
 TI Production of infectious human **respiratory syncytial**  
 virus from cloned cDNA confirms an essential role for the transcription  
 elongation factor from the 5' proximal open reading frame of the  
**M2** mRNA in gene expression and provides a capability for vaccine  
 development.  
 AU Collins P L; Hill M G; Camargo E; Grosfeld H; Chanock R M; Murphy B R  
 CS Laboratory of Infectious Diseases, National Institute of Allergy and  
 Infectious Diseases, Bethesda, MD 20892-0720, USA.  
 SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF  
 AMERICA, (1995 Dec 5) 92 (25) 11563-7.  
 Journal code: 7505876. ISSN: 0027-8424.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English

FS Priority Journals  
 EM 199601  
 ED Entered STN: 19960219  
 Last Updated on STN: 19960219  
 Entered Medline: 19960124  
 AB Infectious human **respiratory syncytial** virus (**RSV**) was produced by the intracellular coexpression of five plasmid-borne cDNAs. One cDNA encoded a complete positive-sense version of the **RSV** genome (corresponding to the replicative intermediate RNA or antigenome), and each of the other four encoded a separate **RSV** protein, namely, the **major nucleocapsid N** protein, the **nucleocapsid P** phosphoprotein, the **major** polymerase **L** protein, or the protein from the 5' proximal open reading frame of the **M2** mRNA [**M2** (**ORF1**)]. **RSV** was not produced if any of the five plasmids was omitted. The requirement for the **M2** (**ORF1**) protein is consistent with its recent identification as a transcription elongation factor and confirms its importance for **RSV** gene expression. It should thus be possible to introduce defined changes into infectious **RSV**. This should be useful for basic studies of **RSV** molecular biology and pathogenesis; in addition, there are immediate applications to the development of live attenuated vaccine strains bearing predetermined defined attenuating mutations.

L6 ANSWER 3 OF 4 MEDLINE  
 AN 92327836 MEDLINE  
 DN 92327836 PubMed ID: 1626423  
 TI Gene junction sequences of bovine **respiratory syncytial** virus.  
 AU Zamora M; Samal S K  
 CS Regional College of Veterinary Medicine, University of Maryland, College Park 20742.  
 SO VIRUS RESEARCH, (1992 Jun) 24 (1) 115-21.  
 Journal code: 8410979. ISSN: 0168-1702.  
 CY Netherlands  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199208  
 ED Entered STN: 19920821  
 Last Updated on STN: 19920821  
 Entered Medline: 19920813  
 AB The nucleotide sequences of seven gene junctions (**N-P**, **P-M**, **M-SH**, **SH-G**, **G-F**, **F-M2** and **M2-L**) of bovine **respiratory syncytial** virus (BRSV) strain A51908 were determined by dideoxynucleotide sequencing of cDNAs from polytranscript mRNAs and from genomic RNA. By comparison with the consensus sequences derived from human **respiratory syncytial** virus (HRSV) mRNAs, gene-start and gene-end sequences were found in all BRSV mRNAs. There was a perfect match between the BRSV and HRSV in all gene-start sequences, except for the sequence of the **SH** gene which contained one nucleotide difference compared to HRSV A2; and the gene-start sequence of the **L** gene, which was one nucleotide shorter than the corresponding sequence of HRSV. Analysis of the intergenic regions showed a high degree of divergence in the nucleotide sequence between BRSV and HRSV. However, the length of the nucleotides in the intergenic sequences was similar for a given gene junction. As in the case of HRSV, the **M2** and **L** genes of BRSV overlap by 68 nucleotides, suggesting a similar transcription attenuation mechanism. The sequences of the overlap, corresponding to the 3' end of the **L** gene, were almost identical between BRSV and HRSV.

L6 ANSWER 4 OF 4 SCISEARCH COPYRIGHT 2003 THOMSON ISI  
 AN 95:716951 SCISEARCH  
 GA The Genuine Article (R) Number: RZ285  
 TI THE COMPLETE GENOME STRUCTURE AND PHYLOGENETIC RELATIONSHIP OF INFECTIOUS  
 HEMATOPOIETIC NECROSIS VIRUS  
 AU MORZUNOV S P; WINTON J R; NICHOL S T (Reprint)  
 CS CTR DIS CONTROL & PREVENT, DIV VIRAL & RICKETTSIAL DIS, 1600 CLIFTON RD  
 NE, ATLANTA, GA, 30333 (Reprint); UNIV NEVADA, DEPT BIOCHEM, RENO, NV,  
 89557; UNIV NEVADA, DEPT MICROBIOL, RENO, NV, 89557; NW BIOL SCI CTR, NATL  
 BIOL SERV, SEATTLE, WA, 98115  
 CYA USA  
 SO VIRUS RESEARCH, (OCT 1995) Vol. 38, No. 2-3, pp. 175-192.  
 ISSN: 0168-1702.  
 DT Article; Journal  
 FS LIFE  
 LA ENGLISH  
 REC Reference Count: 64  
 \*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*  
 AB Infectious hematopoietic necrosis virus (IHNV), a member of the family  
 Rhabdoviridae, causes a severe disease with high mortality in salmonid  
 fish. The nucleotide sequence (11,131 bases) of the entire genome was  
 determined for the pathogenic WRAC strain of IHNV from southern Idaho.  
 This allowed detailed analysis of all 6 genes, the deduced amino acid  
 sequences of their encoded proteins, and important control motifs  
 including leader, trailer and gene junction regions. Sequence analysis  
 revealed that the 6 virus genes are located along the genome in the 3' to  
 5' order: nucleocapsid (N), polymerase-associated phosphoprotein  
 (P or M1), matrix protein (M or M2), surface  
 glycoprotein (G), a unique non-virion protein (NV) and virus polymerase (L).  
 The IHNV genome RNA was found to have highly complementary  
 termini (15 of 16 nucleotides). The gene junction regions display the  
 highly conserved sequence UCURUC(U) (7)RCCGUG(N) (4)CACR (in the  
 vRNA sense), which includes the typical rhabdovirus transcription  
 termination/polyadenylation signal and a novel putative transcription  
 initiation signal. Phylogenetic analysis of M, G and L protein  
 sequences allowed insights into the evolutionary and taxonomic  
 relationship of rhabdoviruses of fish relative to those of insects or  
 mammals, and a broader sense of the relationship of non-segmented  
 negative-strand RNA viruses. Based on these data, a new genus, piscivirus,  
 is proposed which will initially contain IHNV, viral hemorrhagic  
 septicemia virus and Hirame rhabdovirus.